INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT FESOP RENEWAL OFFICE OF AIR QUALITY

National Recovery Systems
5222 Indianapolis Boulevard
East Chicago, Indiana 46312

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F089-13994-00323	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: June 6, 2002 Expiration Date: June 6, 2007

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

C.17 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

C.22 Continuous Compliance Plan [326 IAC 6-1-10.1(q)]

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS - one (1) natural gas fired dryer

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1]

D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.4 Particulate Matter (PM and PM-10)

D.1.5 Visible Emissions Notations

D.1.6 Parametric Monitoring

D.1.7 Baghouse Inspections

D.1.8 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS - one (1) north bulk powder silo

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1]

D.2.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.3 Particulate Matter (PM and PM-10)

D.2.4 Visible Emissions Notations

D.2.5 Parametric Monitoring

D.2.6 Baghouse Inspections

D.2.7 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.8 Record Keeping Requirements

SECTION D.3 FACILITY OPERATION CONDITIONS - one (1) mixer and bucket elevator

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1]

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.3 Particulate Matter (PM and PM-10)

D.3.4 Visible Emissions Notations

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary briquette manufacturing source.

Authorized Individual:	William P. Breedlove, Vice President and General Manager
Source Address:	5222 Indianapolis Boulevard, East Chicago, Indiana 46312
Mailing Address:	5222 Indianapolis Boulevard, East Chicago, Indiana 46312
SIC Code:	3399
County Location:	Lake
County Status:	Nonattainment for SO2, Moderate Non-Attainment for PM-10, Severe Non-Attainment for Ozone Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) one (1) natural gas fired dryer and a cyclone dust collection system rated at 2.5 million British thermal units (Btu) per hour, with a maximum production capacity of 15 tons per hour, controlled by a jetpulse baghouse, exhausting at one (1) stack, identified as S5 (Plants 1 & 2);

(b) one (1) raw material storage silo with a maximum capacity of 60 tons, particulate dust from the baghouse and cyclone are sent to the storage silo by bucket elevator (Plants 1& 2);

(c) one (1) north bulk powder blue silo with a maximum production capacity of 0.525 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting through exhaust vent EV1(Plant 2);

(d) one (1) south bulk powder blue silo with a maximum production capacity of 0.35 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting through exhaust vent EV2 (Plant 2);

(e) one (1) mixer and bucket elevator, controlled by a reverse air baghouse dust collection system, exhausting inside the building through exhaust vent EV8; and one (1) hopper, one (1) shaker, one (1) pug mill, one (1) bucket elevator, and one (1) briquetter, with no controls, each with a maximum capacity of 15 tons per hour, each located on the large briquetting line (Plants 1& 2);

(f) one (1) storage/processing tank #1, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 30 tons, controlled by a 20" by 80" polyester filter bag dust collection system, exhausting (at the bag) inside the building;

(g) one (1) storage/processing tank #2, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 20 tons, controlled by four (4) 20" by 80" polyester filter bag dust collection systems, exhausting (at the bag) inside the building;

(h) one (1) bulk powder storage silo, located on the small briquetting line (Plant 3), with a maximum storage capacity of 60 tons, controlled by a jetpulse baghouse dust collection system, exhausting through exhaust vent EV3;

(i) two (2) mixers (desulf station #1and #2), located on the bagging line, each controlled by a pulsing air baghouse, exhausting inside the building through exhaust vents EV12 and EV13, respectively;

(j) a feeder, muller and briquette press, located on the small briquetting line (Plant 3), both controlled by a pulsing air baghouse, exhausting inside the building through exhaust vent EV11;

(k) four (4) lime storage silos (#1, #2, #3 and #4), located on the bagging line, each with a maximum storage capacity of 30 tons, each controlled by a static, pulsing air baghouse dust collector, exhausting through exhaust vents EV14, EV15, EV16 and EV17, respectively;

(l) two (2) ford stations, controlled by a pulsing air baghouse, exhausting inside the building through exhaust vent EV9.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) paved and unpaved roads and parking lots with public access;

(b) one (1) hopper, located on the bagging line, with a maximum capacity of 4 tons;

(c) one (1) mixer/scale, located on the bagging line with a maximum capacity of 2.5 tons per batch;

(d) natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour;

(e) two (2) 6,000 gallon molasses storage tanks;

(f) equipment powered by internal combustion engines of capacity less than or equal to 0.5 million Btu per hour, except where total capacity of equipment operated by one stationary source exceeds two (2) million Btu per hour;

(g) combustion source flame safety purging on startup;

(h) a petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons and dispensing less than or equal to 230,000 gallons per month;

(i) storage tanks with capacity less than 1,000 gallons and annual throughputs less than 12,000 gallons;

(j) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(k) filling drums, pails or other packaging containers with lubricating oils, waxes, and greases;

(l) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(m) cleaners and solvents having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees Celsius; the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 month;

(n) the following equipment related to manufacturing activities not resulting in the emission of hazardous air pollutants (HAPs): brazing equipment, cutting torches, soldering equipment, welding equipment;

(o) closed loop heating and cooling systems;

(p) solvent recycling systems with batch capacity of less than or equal 100 gallons;

(q) replacement or repair of electrostatic precipitators, bags in baghouse and filters in other air filter equipment;

(r) blowdown for any of the following: sight glass; compressors; boiler; pumps; and cooling towers;

(s) emergency gasoline generators not exceeding 110 horsepower; and

(t) a laboratory as defined in 326 IAC 2-7-1(21)(D).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, . IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ , may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ , by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(a) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ , at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ , may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ , any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ , in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;

(3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-3 (Emission Offset), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM-10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on January 22, 1996. The plan is included as Attachment A.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is (are) in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.16 Continuous Compliance Plan [326 IAC 6-1-10.1(I)(19)

In order to comply with 326 IAC 6-1-10.1(I) a Continuous Compliance Plan (CCP) for the drying system, material storage handling, and the north and south bulk powder silos shall be maintained at the source's property and include the following:

(a) a list of the processes and the facilities at the source;

(b) a list of the particulate matter control equipment associated with the drying system, material storage handling, and the north and south bulk powder silos;

(c) the process operating parameters critical to continuous compliance with the applicable PM-10 emission limits, including particulate matter control equipment operation and the maintenance requirements;

(d) the specific monitoring, recording, and record keeping procedures for process and control equipment for each facility specified in (a) and (b); and

(e) the procedure used to assure that the adequate exhaust ventilation is maintained through each duct at facilities where emissions are captured by a collection hood and transported to a control device.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.17 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does(do) require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Reporting periods are based on calendar years.

C.22 Continuous Compliance Plan [326 IAC 6-1-10.1(q)]

The CCP shall provide that the following control equipment related information and be available for inspection by OAQ personnel:

(a) startup, shutdown, and emergency procedures;

(b) sources shall notify the department fifteen (15) days in advance of startup of either new control equipment or control equipment to which major modifications have been made;

(c) manufacturer's recommended inspection procedures, and safety devices and procedures, such as sensors, alarm systems, and bypass systems. If the manufacturer's recommendations are not available, procedures shall be determined by the source;

(d) contents of the operator's training program and the frequency with which the training is held;

(e) a list of spare parts available at the facility;

(f) a list of control equipment safety devices; and

(g) monitoring and recording devices and/or instruments to monitor and record control equipment operating parameters.

Particulate matter control equipment operation, recording, and inspection procedure requirements shall meet the requirements of 326 IAC 6-1-10.1(r).

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) one (1) natural gas fired dryer and a cyclone dust collection system rated at 2.5 million British thermal units (Btu) per hour, with a maximum production capacity of 15 tons per hour, controlled by a jetpulse baghouse, exhausting at one (1) stack, identified as S5 (Plants 1 & 2);

(b) one (1) raw material storage silo with a maximum capacity of 60 tons, particulate dust from the baghouse and cyclone are sent to the storage silo by bucket elevator (Plants 1& 2).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements):

(a) PM and PM-10 emissions from the drying system shall not exceed 4.060 pounds per hour and 0.203 pounds per ton of material processed.

(b) PM and PM-10 emissions from the material storage handling shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.

Compliance with the above limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 36 and 42 months after issuance of this permit, in order to demonstrate compliance with Condition D.1.1 the Permittee shall perform PM and PM-10 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.4 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.1.1, the baghouse for PM and PM-10 control shall be in operation at all times the dryer and the raw material storage silo are in operation.

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the drying system baghouse stack exhaust and the raw material storage silo shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.6 Parametric Monitoring

The Permittee shall record the differential pressure across the baghouse used in conjunction with the drying system, at least once per shift when the drying system is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the drying system and the storage silo operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of the visible emission notations of the drying system exhaust vent.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Once per shift records of the differential pressure during normal operation when venting to the atmosphere;

(2) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(c) one (1) north bulk powder blue silo with a maximum production capacity of 0.525 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting through exhaust vent EV1(Plant 2);

(d) one (1) south bulk powder blue silo with a maximum production capacity of 0.35 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting through exhaust vent EV2 (Plant 2);

(e) one (1) mixer and bucket elevator, controlled by a reverse air baghouse dust collection system, exhausting inside the building through exhaust vent EV8; and one (1) hopper, one (1) shaker, one (1) pug mill, one (1) bucket elevator, and one (1) briquetter, with no controls, each with a maximum capacity of 15 tons per hour, each located on the large briquetting line (Plants 1& 2);

(f) one (1) storage/processing tank #1, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 30 tons, controlled by a 20" by 80" polyester filter bag dust collection system, exhausting (at the bag) inside the building;

(g) one (1) storage/processing tank #2, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 20 tons, controlled by four (4) 20" by 80" polyester filter bag dust collection systems, exhausting (at the bag) inside the building;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), PM and PM10 emissions from the north and south bulk powder blue silos, mixer and bucket elevator, storage/processing tank #1 and storage/processing tank #2 shall each not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.2.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.2.1, the baghouses for PM and PM-10 control shall be in operation at all times the north and south bulk powder silos and the mixer and bucket elevator are in operation.

D.2.4 Visible Emissions Notations

(a) Visible emission notations of the north and south bulk powder silos and the mixer and bucket elevator exhaust vents shall be performed once per shift during normal daylight operations when the associated facilities are in operation and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or noncontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.5 Parametric Monitoring

The Permittee shall record the differential pressure across the baghouse used in conjunction with the north and south bulk powder silos and the mixer and bucket elevator in Plants 1 and 2, at least or once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the north and south bulk powder silos and the mixer and bucket elevator in Plants 1 and 2, when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.2.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of the visible emission notations of the north and south bulk powder silos and the mixer and bucket elevator in Plants 1 and 2.

(b) To document compliance with Condition D.2.5, the Permittee shall maintain once per shift records of the differential pressure during normal operation when venting to the atmosphere;

(c) To document compliance with Condition D.2.6, the Permittee shall maintain records of the results of the inspections required under Condition D.2.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(h) one (1) bulk powder storage silo, located on the small briquetting line (Plant 3), with a maximum storage capacity of 60 tons, controlled by a jetpulse baghouse dust collection system, exhausting through exhaust vent EV3;

(i) two (2) mixers (desulf stations #1 and #2), located on the bagging line, each controlled by a pulsing air baghouse, exhausting inside the building through exhaust vents EV12 and EV13, respectively;

(j) a feeder, muller and briquette press, located on the small briquetting line (Plant 3), both controlled by a pulsing air baghouse, exhausting inside the building through exhaust vent EV11;

(k) four (4) lime storage silos (#1, #2, #3 and #4), located on the bagging line, each with a maximum storage capacity of 30 tons per hour, each controlled by a static, pulsing air baghouse dust collector, exhausting through exhaust vents EV14, EV15, EV16 and EV17, respectively;

(l) two (2) ford stations, controlled by a pulsing air baghouse, exhausting inside the building through exhaust vent EV9.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), the PM and PM-10 emissions from exhaust vents EV3, EV9, EV11, EV12, EV13, EV14, EV15, EV16 and EV17 shall each not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.3.1, the baghouse**s** for PM and PM-10 control shall be in operation at all times the four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2) are in operation.

D.3.4 Visible Emissions Notations

(a) Visible emission notations of the four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2) exhaust vents, shall be performed once per shift during normal daylight operations when the associated facilities are in operation and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or noncontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.5 Parametric Monitoring

The Permittee shall record the differential pressure across the baghouses used in conjunction with the four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2), at least once per shift when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.8 Record Keeping Requirements

(a) To document compliance with Condition D.3.4, the Permittee shall maintain records of the visible emission notations of the four (4) lime storage silos, the ford station, the feeder, muller and briquette press, and two (2) mixers (desulf stations #1 and #2) exhaust vents.

(b) To document compliance with Condition D.3.5, the Permittee shall maintain once per shift records of the differential pressure during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.3.6, the Permittee shall maintain records of the results of the inspections required under Condition D.3.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: National Recovery Systems
Source Address: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
Mailing Address: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
FESOP No.: F089-13994-00323

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: National Recovery Systems
Source Address: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
Mailing Address: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
FESOP No.: F089-13994-00323

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: National Recovery Systems
Source Address: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
Mailing Address: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
FESOP No.: F089-13994-00323

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: ______________________________

Title/Position: ______________________________

Date: ______________________________

Phone: ______________________________

Attach a signed certification to complete this report.

ATTACHMENT A

BRIQUETTE PLANT SITE FUGITIVE DUST CONTROL PLAN

(a) Fugitive particulate matter emissions from paved roads, unpaved roads, and parking lots shall be controlled by the following method:
Paved roads and parking lots:
(1) using an automatic sweeper.

Unpaved roads and parking lots:
(1) applying water on an as needed basis.

(b) Fugitive particulate matter emissions from storage piles shall be controlled by one or more of the following methods on an as needed basis:
(1) using tarps;
(2) treating the stockpiles with water.

(c) Fugitive particulate matter emissions from transportation of aggregate by truck, front end loader, etc. shall be controlled by the following method:
(1) sealing trucks that enter the plant until they begin to unload at the facility.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Name:	National Recovery System
Source Location:	5222 Indianapolis Blvd, East Chicago, Indiana 46312
SIC Code:	3399
County:	Lake
Operation Permit No.:	F089-13994-00323
Permit Reviewer:	Alic Bent /EVP

On February 1, 2002, the Office of Air Quality (OAQ) had a notice published in the Post Tribune, Merrillville, Indiana, stating that National Recovery System had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal for the operation of a briquette manufacturing source. The notice also stated that OAQ proposed to issue a Federally Enforceable State Operating Permit Renewal for this operation and provided information on how the public could review the proposed FESOP Renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP Renewal should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the FESOP Renewal. Bolded language has been added and the language with a line through it has been deleted.

1. Condition A.5 Prior Permit Superseded [326 IAC 2-1.1-9.5]

Condition A.5 Prior Permit Superseded was added to the permit to implement the intent of the new rule 326 IAC 2-1.1-9.5.

~~A.5 Prior Permit Conditions~~

~~(a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.~~

~~(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.~~

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

2. Condition C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
Condition D.1.7 Visible Emissions Notations
Condition D.1.8 Parametric Monitoring
Condition D.1.10 Broken or Failed Bag Detection

The name of Condition C.18 has been changed to better reflect the contents of the condition.

C.18 Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

3. SECTION A.2 Emissions Units and Pollution Control Equipment Summary

The following facilities description have been changed to better reflect the source's content:

(a) one (1) natural gas fired dryer **and a cyclone dust collection system** rated at 2.5 million British thermal units **(Btu)** per hour, with a maximum production capacity of 15 tons per hour, controlled by a jetpulse baghouse ~~and a cyclone dust collection system~~, exhausting at one (1) stack, identified as S5 (Plants 1 & 2);

(b) one (1) raw material storage silo with a maximum capacity of 60 tons, particulate dust from the baghouse and cyclone are sent to the storage silo by bucket elevator (Plants 1& 2);

(c) one (1) north bulk powder blue silo with a maximum production capacity of 0.525 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting ~~at one (1) stack, identified as S~~ **through exhaust vent EV**1(Plant 2);

(d) one (1) south bulk powder blue silo with a maximum production capacity of 0.35 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting ~~at one (1) stack, identified as S~~ **through exhaust vent EV**2 (Plant 2);

(e) one (1) mixer and bucket elevator, controlled by a reverse air baghouse dust collection system, exhausting ~~at one (1) stack, identified as S~~ **inside the building through exhaust vent EV**8; and one (1) hopper, one (1) shaker, one (1) pug mill, one (1) bucket elevator, and one (1) briquetter, with no controls, each with a maximum capacity of 15 tons per hour, each located on the large briquetting line (Plants 1& 2);

(f) one (1) storage/processing tank #1, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 30 tons, controlled by a 20" by 80" polyester filter bag ~~dust collection system~~, exhausting ~~at one (1) stack, identified as S6~~ **(at the bag) inside the building**;

(g) one (1) storage/processing tank #2, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 20 tons, controlled by four (4) 20" by 80" polyester filter bag dust collection systems, exhausting ~~at one (1) stack, identified as S6~~ **(at the bag) inside the building**;

(h) one (1) bulk powder storage silo, located on the small briquetting line (Plant 3), with a maximum storage capacity of 60 tons, controlled by a jetpulse baghouse dust collection system, exhausting ~~at one (1) stack, identified as S~~ **through exhaust vent EV**3;

(i) two (2) mixers (desulf stations #1 and #2), located on the ~~desulf~~ **bagging** line, ~~both~~ **each** controlled by a pulsing air baghouse, exhausting ~~at stacks S12 and S13~~ **inside the building through exhaust vents EV12 and EV13**, respectively;

(j) **a** feeder, muller and briquette press, located on the small briquetting line (Plant 3), both controlled by a pulsing air baghouse, exhausting ~~at stack S11~~ **inside the building through exhaust vent EV11**;

(k) ~~three (3) high calcium~~ **four (4)** lime storage silos (#1, #2, **#3** and #4), located on the bagging line, each with a maximum storage capacity of 30 tons per hour, ~~all~~ **each** controlled by a static, pulsing air baghouse dust collector, exhausting ~~at stacks S14, S15 and S16~~ **through exhaust vents EV14, EV15, EV16 and EV17**, respectively;

~~(l) one (1) dolo lime storage silo #3, located on the bagging line, with a maximum storage capacity of 30 tons, controlled by a static, pulsing air baghouse dust collector, exhausting at one (1) stack, identified as S17.~~

(~~m~~**l**) two (2) ford stations, controlled by a pulsing air baghouse, exhausting ~~at stack S9~~ **inside the building through exhaust vent EV9**.

4. SECTION A.3 Insignificant Activities

The following facilities description have been changed to better reflect the source's content:

~~(p) any of the following steel and bridge fabrication activities: cutting 200,000 linear feet or less of one inch (1") plate or equivalent; using 80 tons or less of welding consumables;~~

(~~o~~**p**) solvent recycling systems with batch capacity of less than or equal 100 gallons;

(~~r~~**q**) replacement or repair of electrostatic precipitators, bags in baghouse and filters in other air filter equipment;

(~~s~~**r**) blowdown for any of the following: sight glass; compressors; boiler; pumps; and cooling towers;

~~(t) furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume;~~

(~~u~~**s**) emergency gasoline generators not exceeding 110 horsepower; and

(~~v~~**t**) a laboratory as defined in 326 IAC 2-7-1~~(20)(C)~~ **(21)(D)**.

5. C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

The word “performed” was removed from the permit to clarify the statement.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing ~~performed~~ required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

6. SECTION D.1 Facility Description Box

The following facility description has been changed to better reflect the source’s content:

(a) one (1) natural gas fired dryer **and a cyclone dust collection system** rated at 2.5 million British thermal units **(Btu)** per hour, with a maximum production capacity of 15 tons per hour, controlled by a jetpulse baghouse ~~and a cyclone dust collection system~~, exhausting ~~at one (1) stack, identified as S5~~ **through exhaust vent EV5** (Plants 1 & 2);

7. D.1.3 Testing Requirements

The testing period was changed as follows, since the last testing was done in September 2000.

D.1.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between ~~30 and 36~~ **36 and 42** months after issuance of this permit, in order to demonstrate compliance with Condition D.1.1 the Permittee shall perform PM and PM-10 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C-Performance Testing.

8. D.1.5 Visible Emissions Notations

The following language has been changed to clarify the statement.

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the drying system ~~baghouse stack~~ exhaust **vent** and the raw material storage silo shall be performed once per shift during normal daylight operations when **the associated facilities are in operation** ~~exhausting to the atmosphere~~. A trained employee shall record whether emissions are normal or abnormal.

(c) In the case of batch or ~~dis~~**non**continuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

9. D.1.6 Parametric Monitoring

D.1.6 Parametric Monitoring

The Permittee shall record the ~~total static~~ **differential** pressure ~~drop~~ across the baghouse used in conjunction with the drying system, at least once per shift when the drying system is in operation when venting to the atmosphere. When for any one reading, the pressure drop across baghouse is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.1.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags ~~(S5)~~ controlling the drying system and the storage silo operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

10. D.2.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

The PM and PM-10 emissions have been corrected as follows:

D.2.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements):

(1) PM and PM10 emissions from baghouse S1 shall not exceed ~~0.012~~ **0.68** pounds per hour and ~~0.001~~ **0.034** pounds per ton of material processed.

(2) PM and PM10 emissions from baghouse S2 shall not exceed 0.012 pounds per hour and 0.001 pounds per ton of material processed.

11. D.2.3 Particulate Matter (PM and PM-10)

The following has been updated to the current source description.

D.2.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.2.1, the baghouse**s** for PM and PM-10 control shall be in operation at all times the north and south bulk powder **blue** silos are in operation.

12. The IDEM, OAQ has decided to simplify the permit by combining Sections D.2, D.3 and D.4 to form a new Section D.2. The facilities description have been changed to better reflect the contents of the source.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(c) one (1) north bulk powder blue silo with a maximum production capacity of 0.525 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting ~~at one (1) stack, identified as S1~~ **through exhaust vent EV1**(Plant 2);

(d) one (1) south bulk powder blue silo with a maximum production capacity of 0.35 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting ~~at one (1) stack, identified as S2~~ **through exhaust vent EV2** (Plant 2);

(e) one (1) mixer and bucket elevator, controlled by a reverse air baghouse dust collection system, exhausting ~~at one (1) stack, identified as S8~~ **inside the building through exhaust vent EV8**; and one (1) hopper, one (1) shaker, one (1) pug mill, one (1) bucket elevator, and one (1) briquetter, with no controls, each with a maximum capacity of 15 tons per hour, each located on the large briquetting line (Plants 1& 2);

(f) one (1) storage/processing tank #1, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 30 tons, controlled by a 20" by 80" polyester filter bag ~~dust collection system~~, exhausting ~~at one (1) stack, identified as S6~~ **(at the bag) inside the building**;

(g) one (1) storage/processing tank #2, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 20 tons, controlled by four (4) 20" by 80" polyester filter bag dust collection systems, exhausting ~~at one (1) stack, identified as S6~~ **(at the bag) inside the building**;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]
Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements)~~:~~ **,**

~~(1)~~ PM and PM10 emissions from ~~baghouse S1~~ **the north and south bulk powder blue silos, mixer and bucket elevator, storage/processing tank #1 and storage/processing tank #2** shall **each** not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.

~~(2) PM and PM10 emissions from baghouse S2 shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed.~~

Compliance with the above limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.2.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.2.1, the baghouses for PM and PM-10 control shall be in operation at all times the north and south bulk powder silos **and the mixer and bucket elevator** are in operation.

D.2.4 Visible Emissions Notations

(a) Visible emission notations of the north and south bulk powder silos **and the mixer and bucket elevator** ~~in Plant 2 stack~~ exhaust **vents** shall be performed once per shift during normal daylight operations when **the associated facilities are in operation and** exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or ~~dis~~**non**continuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.2.5 Parametric Monitoring

The Permittee shall record the ~~total static~~ **differential** pressure ~~drop~~ across the baghouse used in conjunction with the north and south bulk powder silos **and the mixer and bucket elevator** in Plant**s 1 and** 2, at least or once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses ~~S1 and S2~~ is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags ~~(S1 and S2)~~ controlling the north and south bulk powder silos **and the mixer and bucket elevator** in Plant**s 1 and** 2, when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.2.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of the visible emission notations of the north and south bulk powder silos **and the mixer and bucket elevator** in Plant**s 1 and** 2.

(b) To document compliance with Condition D.2.5, the Permittee shall maintain once per shift records of the differential pressure during normal operation when venting to the atmosphere;

(c) To document compliance with Condition D.2.6, the Permittee shall maintain records of the results of the inspections required under Condition D.2.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

13. The IDEM, OAQ has decided to simplify the permit by combining Sections D.5, D.6 and D.7 to form a new Section D.3. The facilities description and some permit language have been changed to better reflect the contents of the source.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

~~(e) one (1) mixer and bucket elevator, controlled by a reverse air baghouse dust collection system, exhausting at one (1) stack, identified as S8; and one (1) hopper, one (1) shaker, one (1) pug mill, one (1) bucket elevator, and one (1) briquetter, with no controls, each with a maximum capacity of 15 tons per hour, each located on the large briquetting line (Plants 1& 2).~~

(h) one (1) bulk powder storage silo, located on the small briquetting line (Plant 3), with a maximum storage capacity of 60 tons, controlled by a jetpulse baghouse dust collection system, exhausting ~~at one (1) stack, identified as S3~~ **through exhaust vent EV3**;

(i) two (2) mixers (desulf stations #1 and #2), located on the ~~desulf~~ **bagging** line, ~~both~~ **each** controlled by a pulsing air baghouse, exhausting ~~at stacks S12 and S13~~ **inside the building through exhaust vents EV12 and EV13**, respectively;

(j) **a** feeder, muller and briquette press, located on the small briquetting line (Plant 3), both controlled by a pulsing air baghouse, exhausting ~~at stack S11~~ **inside the building through exhaust vent EV11**;

(k) ~~three (3) high calcium~~ **four (4)** lime storage silos (#1, #2, **#3** and #4), located on the bagging line, each with a maximum storage capacity of 30 tons per hour, ~~all~~ **each** controlled by a static, pulsing air baghouse dust collector, exhausting ~~at stacks S14, S15 and S16~~ **through exhaust vents EV14, EV15, EV16 and EV17**, respectively;

~~(l) one (1) dolo lime storage silo #3, located on the bagging line, with a maximum storage capacity of 30 tons, controlled by a static, pulsing air baghouse dust collector, exhausting at one (1) stack, identified as S17.~~

(~~m~~l) two (2) ford stations, controlled by a pulsing air baghouse, exhausting ~~at stack S9~~ **inside the building through exhaust vent EV9**.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), the PM and PM-10 emissions from ~~baghouse S8~~ **exhaust vents EV3, EV9, EV11, EV12, EV13, EV14, EV15, EV16 and EV17** shall **each** not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.3.1, the baghouse**s** for PM and PM-10 control shall be in operation at all times the ~~mixer and bucket elevator is~~ **four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2) are** in operation.

D.3.4 Visible Emissions Notations

(a) Visible emission notations of the ~~mixer and bucket elevator baghouse stack~~ **four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2) exhaust vents**, shall be performed once per shift during normal daylight operations when **the associated facilities are in operation and** exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or ~~dis~~**non**continuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.3.5 Parametric Monitoring

The Permittee shall record the ~~total static~~ **differential** pressure ~~drop~~ across the baghouse**s** used in conjunction with the ~~mixer and bucket elevator~~ **four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2)**, at least once per shift when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags ~~(S8)~~ controlling the ~~mixer and bucket elevator~~ **four (4) lime storage silos, the ford stations, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2)** when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.8 Record Keeping Requirements

(a) To document compliance with Condition D.3.4, the Permittee shall maintain records of the visible emission notations of the ~~mixer and bucket elevator~~ **four (4) lime storage silos, the ford station, the feeder, muller and briquette press, and two (2) mixers (desulf stations #1 and #2)** ~~stack exhausts~~ **exhaust vents**.

(b) To document compliance with Condition D.3.5, the Permittee shall maintain once per shift records of the differential pressure during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.3.6, the Permittee shall maintain records of the results of the inspections required under Condition D.3.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(f) one (1) storage/processing tank #1, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 30 tons, controlled by a 20" by 80" polyester filter bag dust collection system, exhausting at one (1) stack, identified as S6;

(g) one (1) storage/processing tank #2, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 20 tons, controlled by four (4) 20" by 80" polyester filter bag dust collection systems, exhausting at one (1) stack, identified as S7;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]
Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), the PM and PM-10 emissions from baghouse S6 and S7, each shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7
(Part 70) are not applicable.

D.4.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.3 Particulate Matter (PM and PM-10)
In order to comply with PM and PM-10 limits in D.4.1, the bags for PM and PM-10 control shall be in operation at all times storage/processing tank #1 and storage/processing tank #2 are in operation.

D.4.4 Visible Emissions Notations

(a) Visible emission notations of storage/processing tank #1 and storage/processing tank #2 stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.4.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the filter bag dust collection system used in conjunction with storage/processing tank #1 and storage/processing tank #2, at least once per shift when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across baghouses S6 and S7 is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags (S6 and S7) controlling storage/processing tank #1 and storage/processing tank #2 operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.4.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.8 Record Keeping Requirements

(a) To document compliance with Condition D.4.4 the Permittee shall maintain records of the visible emission notations of storage/processing tank #1 and storage/processing tank #2 exhaust vents.

(b) To document compliance with Condition D.4.5, the Permittee shall maintain the following:

(1) Once per shift records of the differential pressure during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.4.6, the Permittee shall maintain records of the results of the inspections required under Condition D.4.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(h) one (1) bulk powder storage silo, located on the small briquetting line (Plant 3), with a maximum storage capacity of 60 tons, controlled by a jetpulse baghouse dust collection system, exhausting at one (1) stack, identified as S3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.5.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), the PM and PM-10 emissions from baghouse S3 shall not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and

326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.5.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.5.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.5.1, the baghouse for PM and PM-10 control shall be in operation at all times the bulk powder storage silo is in operation.

D.5.4 Visible Emissions Notations

(a) Visible emission notations of the bulk powder storage silo stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.5.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the jetpulse baghouse dust collection system used in conjunction with the bulk powder storage silo, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.6 Baghouse Inspections

An inspection shall be performed each calender quarter of the baghouse (S3) controlling the bulk powder storage silo when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.5.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.8 Record Keeping Requirements

(a) To document compliance with Condition D.5.4 the Permittee shall maintain records of the visible emission notations of the bulk powder storage silo exhaust vents.

(b) To document compliance with Condition D.5.5, the Permittee shall maintain the following:

(1) Once per shift records of the differential pressure during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.5.6, the Permittee shall maintain records of the results of the inspections required under Condition D.5.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

SECTION D.6 FACILITY CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) two (2) mixers (desulf stations #1 and #2), located on the desulf line, both controlled by a pulsing air baghouse, exhausting at stacks S12 and S13, respectively;

(j) feeder, muller and briquette press, located on the small briquetting line (Plant 3), both controlled by a pulsing air baghouse, exhausting at stack S11;

(m) two (2) ford stations, controlled by a pulsing air baghouse, exhausting at stack S9.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.6.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]

Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), the PM and PM-10 emissions from baghouses S9, S11, S12 and S13 shall each not exceed 0.68 pounds per hour and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.6.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.6.3 Particulate Matter (PM and PM-10)

In order to comply with PM and PM-10 limits in D.6.1, the baghouse for PM and PM-10 control shall be in operation at all times the two (2) mixers (desulf stations #1 and #2), the feeder, muller and briquette press, and the ford station are in operation.

~~D.6.4 Visible Emissions Notations~~

~~(a) Visible emission notations of the two (2) mixers (desulf stations #1 and #2)stack exhausts, the feeder, muller and briquette press, and the ford station shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~

~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~

~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~

~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~

~~(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~D.6.5 Parametric Monitoring~~

~~The Permittee shall record the total static pressure drop across the pulsing air baghouses (S9, S11, S12 and S13) used in conjunction with the ford station, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2), respectively, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

~~D.6.6 Baghouse Inspections~~

~~An inspection shall be performed each calender quarter of the baghouses (S9, S11, S12 and S13) controlling the ford station, the feeder, muller and briquette press, and the two (2) mixers (desulf stations #1 and #2), respectively, when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.~~

D.6.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.6.8 Record Keeping Requirements

(a) To document compliance with Condition D.6.4 the Permittee shall maintain records of the visible emission notations of the ford station, the feeder, muller and briquette press, and two (2) mixers (desulf stations #1 and #2) exhaust vents.

(b) To document compliance with Condition D.6.5, the Permittee shall maintain the following:

(1) Once per shift records of the differential pressure during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.6.6, the Permittee shall maintain records of the results of the inspections required under Condition D.6.6 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(k) three (3) high calcium lime storage silos (#1, #2, and #4), located on the bagging line, each with a maximum storage capacity of 30 tons per hour, all controlled by a static, pulsing air baghouse dust collector, exhausting at stacks S14, S15 and S16, respectively;

(l) one (1) dolo lime storage silo #3, located on the bagging line, with a maximum storage capacity of 30 tons, controlled by a static, pulsing air baghouse dust collector, exhausting at one (1) stack, identified as S17.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.7.1 Particulate Matter (PM and PM-10) [326 IAC 6-1-10.1] [326 IAC 2-2] [326 IAC 2-8]
Pursuant to 326 IAC 6-1-10.1(d)(32) (Lake County PM-10 Emission Requirements), the PM and PM-10 emissions from each baghouse shall not exceed 0.68 pounds per hour each and 0.034 pounds per ton of material processed. Compliance with these limits shall also limit both source wide PM and PM-10 emissions pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), respectively, to 56.61 tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70) are not applicable.

D.7.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.7.3 Particulate Matter (PM and PM-10)
In order to comply with PM and PM-10 limits in D.7.1, the baghouse for PM and PM-10 control shall be in operation at all times the three (3) high calcium lime storage silos (#1, #2, and #4) are in operation.

D.7.4 Visible Emissions Notations

(a) Visible emission notations of the three (3) high calcium lime storage silos and the one (1) dolo lime storage silo stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.7.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (S14, S15, S16 and S17) used in conjunction with the three (3) high calcium lime storage silos and the one (1) dolo lime storage silo, at least once per shift when the three (3) high calcium lime storage silos and the one (1) dolo lime storage silo are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.7.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the three (3) high calcium lime storage silos and the one (1) dolo lime storage silo operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.7.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.7.8 Record Keeping Requirements

(a) To document compliance with Condition D.7.4 the Permittee shall maintain records of the visible emission notations of the three (3) high calcium lime storage silos and the one (1) dolo lime storage silo.

~~(b) To document compliance with Condition D.7.5, the Permittee shall maintain the following:~~

~~(1) Once per shift records of the differential pressure during normal operation when venting to the atmosphere.~~

~~(c) To document compliance with Condition D.7.6, the Permittee shall maintain records of the results of the inspections required under Condition D.7.6 and the dates the vents are redirected.~~

~~(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

~~There are no specific reporting requirements applicable to these facilities.~~

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name: National Recovery Systems
Source Location: 5222 Indianapolis Boulevard, East Chicago, Indiana 46312
County: Lake
SIC Code: 3399
FESOP Renewal No.: F089-13994-00323
Permit Reviewer: Alic Bent/EVP

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from National Recovery Systems relating to the operation of a briquette manufacturing plant. National Recovery Systems was issued FESOP 089-5247-00323 on December 12,1996 that will expire on December 12, 2001. Plants 1, 2 and 3 are the names of the buildings located at the one (1) source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) one (1) natural gas fired dryer rated at 2.5 million British thermal units (Btu) per hour, with a maximum production capacity of 15 tons per hour, controlled by a jetpulse baghouse and a cyclone dust collection system, exhausting at one (1) stack, identified as S5 (Plants 1& 2);

(b) one (1) raw material storage silo with a maximum capacity of 60 tons, particulate dust from the baghouse and cyclone are sent to the storage silo by bucket elevator (Plants 1& 2);

(c) one (1) north bulk powder blue silo with a maximum production capacity of 0.525 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting at one (1) stack, identified as S1(Plant 2);

(d) one (1) south bulk powder blue silo with a maximum production capacity of 0.35 tons per hour, controlled by a jetpulse baghouse dust collection system, exhausting at one (1) stack, identified as S2 (Plant 2);

(e) one (1) mixer and bucket elevator, controlled by a reverse air baghouse dust collection system, exhausting at one (1) stack, identified as S8; and one (1) hopper, one (1) shaker, one (1) pug mill, one (1) bucket elevator, and one (1) briquetter, with no controls, each with a maximum capacity of 15 tons per hour, each located on the large briquetting line (Plants 1& 2);

(f) one (1) storage/processing tank #1, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 30 tons, controlled by a 20" by 80" polyester filter bag dust collection system, exhausting at one (1) stack, identified as S6;

(g) one (1) storage/processing tank #2, located on the large briquetting line (Plants 1& 2), with a maximum storage capacity of 20 tons, controlled by four (4) 20" by 80" polyester filter bag dust collection systems, exhausting at one (1) stack, identified as S7;

(h) one (1) bulk powder storage silo, located on the small briquetting line (Plant 3), with a maximum storage capacity of 60 tons, controlled by a jetpulse baghouse dust collection system, exhausting at one (1) stack, identified as S3;

(i) one (1) mixer (desulf station #1), located on the desulf line, with a maximum production capacity of 15 tons per hour, controlled by a pulsing air baghouse, exhausting at stack S12;

(j) feeder, muller and briquette press, located on the small briquetting line (Plant 3), both controlled by a pulsing air baghouse, exhausting at stack S11;

(k) three (3) high calcium lime storage silo (#1, #2, and #4), located on the bagging line, each with a maximum storage capacity of 30 tons per hour, all controlled by a static, pulsing air baghouse dust collector, exhausting at stacks S14, S15 and S16, respectively;

(l) one (1) dolo lime storage silo #3, located on the bagging line, with a maximum storage capacity of 30 tons, controlled by a static, pulsing air baghouse dust collector, exhausting at one (1) stack, identified as S17;

(m) two (2) ford stations, controlled by a pulsing air baghouse, exhausting at stack S9.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units, which pursuant to 326 IAC 2-8-11.1(d)(5)(C)(i), should have received a minor permit revision:

(a) one (1) mixer (desulf station #2), located on the desulf line, constructed in 2001, with a maximum production capacity of 15 tons per hour, controlled by a pulsing air baghouse, exhausting at stack S13.

New Emission Units and Pollution Control Equipment Receiving New Source Review Approval

There are no new emission units at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) paved and unpaved roads and parking lots with public access;

(b) one (1) hopper, located on the bagging line, with a maximum capacity of 4 tons;

(c) one (1) mixer/scale, located on the bagging line with a maximum capacity of 2.5 tons per batch;

(d) natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour;

(e) two (2) 6,000 gallon molasses storage tanks;

(f) equipment powered by internal combustion engines of capacity less than or equal to 0.5 million Btu per hour, except where total capacity of equipment operated by one stationary source exceeds two (2) million Btu per hour;

(g) combustion source flame safety purging on startup;

(h) a petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons and dispensing less than or equal to 230,000 gallons per month;

(i) storage tanks with capacity less than 1,000 gallons and annual throughputs less than 12,000 gallons;

(j) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(k) filling drums, pails or other packaging containers with lubricating oils, waxes, and greases;

(l) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(m) cleaners and solvents having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees Celsius; the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 month;

(n) the following equipment related to manufacturing activities not resulting in the emission of hazardous air pollutants (HAPs): brazing equipment, cutting torches, soldering equipment, welding equipment;

(o) closed loop heating and cooling systems;

(p) any of the following steel and bridge fabrication activities: cutting 200,000 linear feet or less of one inch (1") plate or equivalent; using 80 tons or less of welding consumables;

(q) solvent recycling systems with batch capacity of less than or equal 100 gallons;

(r) replacement or repair of electrostatic precipitators, bags in baghouse and filters in other air filter equipment;

(s) blowdown for any of the following: sight glass; compressors; boiler; pumps; and cooling towers;

(t) furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume;

(u) emergency gasoline generators not exceeding 110 horsepower; and

(v) a laboratory as defined in 326 IAC 2-7-1(20)(C).

Existing Approvals

(a) FESOP 089-5247-00323, issued on December 12 1996; and expires December 12 2001;

(b) First Minor Permit Modification: 089-9654-00323, issued on July 24, 1998;

(c) Second Minor Permit Modification: 089-11376-00323, issued on December 1, 1999.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the operation permit rules.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on March 2, 2001.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations pages 1 through 8.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	25,224.93
PM-10	22,626.18
SO_2	0.01
VOC	0.08
CO	1.28
NO_x	1.52

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on December 12, 1996, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. The source has added an emission unit (Desulf station #2) since the original permit was issued on December 12, 1996. The new emissions are reflected in the following table.

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Dryer	5.62	0.76	negl.	0.06	0.90	1.07	negl.
North Bulk Powder Blue Silo	0.06	0.06	-	-	-	-	-
South Bulk Powder Blue Silo	0.06	0.06	-	-	-	-	-
Portland Cement Storage Tank	0.83	0.83	-	-	-	-	-
Storage Processing Tanks #1 and #2	1.66	1.66	-	-	-	-	-
Mixer & Bucket Elevator	1.07	1.07	-	-	-	-	-
Ford Station	1.07	1.07	-	-	-	-	-
Feeder, Muller & Briquette Press	6.94	6.94	-	-	-	-	-
Desulf Station #1	1.07	1.07	-	-	-	-	-
Desulf station #2	1.07	1.07	-	-	-	-	-
Dolo Lime Silo #3	0.83	0.83	-	-	-	-	-
High Calcium Lime Silo #1	0.83	0.83	-	-	-	-	-
High Calcium Lime Silo #2	0.83	0.83	-	-	-	-	-
High Calcium Lime Silo #4	0.83	0.83	-	-	-	-	-
* Insignificant Activities	18.29	4.83	negl.	0.02	0.38	0.45	negl.
Total PTE After Issuance	41.04	22.72	negl.	0.08	1.28	1.52	negl.

* Insignificant activities include conveying/handling, boiler, storage piles and unpaved roads.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	moderate non-attainment
SO_2	non-attainment
NO_2	attainment
Ozone	severe non-attainment
CO	non-attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. This source is located in Lake County therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone.

(b) A portion of Lake County has been classified as nonattainment for particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM-10), sulfur dioxide (SO2) and carbon monoxide (CO). The source is located in East Chicago which is in the PM-10, SO2 and CO nonattainment portions of Lake County.

Federal Rule Applicability

There are no new federal rules applicable to this source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for original FESOP F089-5247-00323, issued on December 12, 1996.

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this source.

State Rule Applicability - Entire Source

There are no new state rules applicable to this source during this FESOP renewal review process. The applicability determination that follows is based on the initial review conducted for original FESOP F089-5247-00323, issued on December 12, 1996.

326 IAC 2-6 (Emission Reporting)

This source is located in Lake County which is one of the specifically regulated counties, but it has the potential to emit NOx and VOC less than ten (10) tons per year each and potential to emit PM-10 SO2 and CO less than one hundred (100) tons per year each. Therefore, the requirements of 326 IAC 2-6 do not apply to this source.

326 IAC 5-1-2 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-1 (Nonattainment Area Limitations)

This rule does not apply to sources or facilities specifically listed in 326 IAC 6-1-7. This source is located in the particulate matter nonattainment area of Lake County and is specifically listed under 326 IAC 6-1-7 for Lake County Point Source Strategy (326 IAC 6-1-10.1) and Lake County Fugitive Dusts Requirements (326 IAC 6-1-11.1). Therefore, the requirements of 326 IAC 6-1-1 do not apply.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5(a), the requirements of this rule does not apply to a source of fugitive PM emission located in Lake County. Since this source is located in Lake County, this rule does not apply.

State Rule Applicability - Individual Facilities

There are no new state rules applicable to this source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for original FESOP F089-5247-00323, issued on December 12, 1996.

326 IAC 6-1-10.1 (Lake County PM-10 Emissions Requirements)

The drying system, material storage handling, and the north and south bulk powder silos at National Recovery Systems are subject to 326 IAC 6-1-10.1(d)(32). Pursuant to the rule, the particulate matter missions from drying system, material storage handling, and the north and south bulk powder silos shall be limited as follows:

Process/emission unit	Emission Limit (lbs/ton)	Emission Limit (lbs/hr)
Drying System	0.203	4.06
Material Storage Handling	0.034	0.680
Portland Cement Storage Tank	0.034	0.680
Each Storage Processing Tank (#1 and #2)	0.034	0.680
Mixer & Bucket Elevator	0.034	0.680
Ford Station	0.034	0.680
Feeder, Muller & Briquette Press	0.034	0.680
Each Desulf Station (#1 and #2)	0.034	0.680
Dolo Lime Silo #3	0.034	0.680
Each High Calcium Lime Silo (#1, #2 and #4)	0.034	0.680
*Each Bulk Powder Blue Silo (North and South)	0.001	0.012

* Operation Permit Number 45-05-93-0481 issued April 16, 1990 for the lime storge silos (listed under 326 IAC 6-1-10.1) included two (2) identical storage silos. Since the issuance of this permit, National Recovery Systems has converted the lime fines storage silos to bulk powder silos, identified as the north and south bulk powder blue silos.

In order to comply with 326 IAC 6-1-10.1(I) a Continuous Compliance Plan (CCP) for the drying system, material storage handling, and the north and south bulk powder blue silos shall be maintained at the source's property and include the following:

(a) a list of the processes and the facilities at the source;

(b) a list of the particulate matter control equipment associated with the drying system, material storage handling, and the north and south bulk powder blue silos;

(c) the process operating parameters critical to continuous compliance with the applicable PM-10 emission limits, including particulate matter control equipment operation and the maintenance requirements;

(d) the specific monitoring, recording, and record keeping procedures for process and control equipment for each facility specified in (a) and (b); and

(e) the procedure used to assure that the adequate exhaust ventilation is maintained through each duct at facilities where emissions are captured by a collection hood and transported to a control device.

The CCP shall provide that the following control equipment related information and be available for inspection by OAQ personnel:

(a) startup, shutdown, and emergency procedures;

(b) sources shall notify the department fifteen (15) days in advance of startup of either new control equipment or control equipment to which major modifications have been made;

(c) manufacturer's recommended inspection procedures, and safety devices and procedures, such as sensors, alarm systems, and bypass systems. If the manufacturer's recommendations are not available, procedures shall be determined by the source;

(d) contents of the operator's training program and the frequency with which the trainig is held;

(e) a list of spare parts available at the facility;

(f) a list of control equipment safety devices; and

(g) monitoring and recording devices and/or instruments to monitor and record control equipment operating parameters.

Particulate matter control equipment operation, recording, and inspection procedure requirements shall meet the requirements of 326 IAC 6-1-10.1(r).

326 IAC 6-1-11.1 (Lake County Fugitive Dusts Requirements)

This source is subject to the control requirements of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), for each facility or operation having a potential to emit five (5) tons per year or more of fugitive particulate matter. Pursuant to 326 IAC 6-1-11.1, the following particulate matter emission limitations apply:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM-10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on January 22, 1996. The plan is included in the permit as Attachment A.

326 IAC 6-2-2 (Particulate Emission Limitations)

The (1) boiler rated at 1.05 MMBtu/hr was constructed before September 21, 1983 (constructed in 1978), and shall be limited by the following equation:

$$Pt = \frac{0.87}{Q^{0.16}} = \frac{0.87}{1.05^{0.16}} = 0.86 \text{ lb/mmBtu}$$

where: Q = total source rated capacity in mmBtu/hr

Pursuant to 326 IAC 6-2-2(a) for boilers with capacity rating less than 10 mmBtu/hr, the allowable PM emissions is 0.6 lb/mmBtu. Therefore, PM emissions limit for the boiler is 0.6 lb/mmBtu. The boiler emits a maximum of 0.007 pounds of PM per MMBtu heat input and is in compliance with 326 IAC 6-2-4.

326 IAC 6-3-2 (Process Operations)

The drying system, material storage handling, and each stack serving lime fines storage silos (2 stacks) at National Recovery Systems are not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is not consistent with applicable limitations in 326 IAC 6-1. Since the applicable PM limits established by 326 IAC 6-1-10.1, are less than the PM limits that would be established by 326 IAC 6-3-2, the more stringent limits apply and the limits pursuant to 326 IAC 6-3-2 do not apply.

Testing Requirements

All testing requirements from previous approvals were incorporated into this FESOP. This source is subject to 326 IAC 6-1-10.1 (Lake County PM-10 Emissions Requirements), and shall comply with the particulate matter (PM-10) compliance testing requirements of the rule.

Previous stack tests to comply with this requirement were conducted as follows:

(a) PM-10 testing was performed in September 2000.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this FESOP Renewal, except the frequencies for visible emission notations and baghouse pressure drop readings have been changed to once per shift.

Reason changed: Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequent than weekly or even daily in such cases where a source operates more than one shift per day. The OAQ believes that changing visible emissions notations to once per operating shift is a reasonable requirement. Therefore, the requirements to perform visible emissions notations have been changed from weekly to once per shift. This change likewise applies to the pressure drop readings. The compliance monitoring requirements applicable to this source are as follows:

1. The briquetting operation has applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the natural gas fired dryer baghouse stack exhaust, the raw material storage handling, and the north and south bulk powder silos located in Plants 1, 2 and 3 shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee will record whether emissions are normal or abnormal.

(b) The Permittee shall record the total static pressure drop across the baghouses controlling the dryer system, material storage handling and the north and south bulk powder silos at least once per shift when the systems are in operation and venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps.

(c) An inspection shall be performed each calender quarter of all bags controlling the dryer system, material storage handling and the north and south bulk powder silos when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

These monitoring conditions are necessary because the baghouses for the dryer system, material storage handling and the north and south bulk powder blue silos must operate properly to ensure compliance with 326 IAC 6-1-10.1 (Lake County PM-10 Emissions Requirements) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this briquette manufacturing plant shall be subject to the conditions of the attached proposed FESOP Renewal No.: F089-13994-00323.

Company Name:	National Recovery Systems
Plant Location:	5222 Indianapolis Boulevard, East Chicago, IN 46312
County:	Lake
Date:	October 11, 2001
Permit Reviewer:	Alic Bent/EVP

**** boiler combustion****

The following calculations determine the amount of emissions created by natural gas combustion, from the boiler, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1 and 1.4-2.

Criteria Pollutant: 1.05 MMBtu/hr * 8,760 hr/yr / 1020 Btu/cf * 2,000 lb/ton * Ef (lb/MMcf) = (ton/yr)

P M:	7.6	lb/MMcf =	**0.03 ton/yr**
P M-10:	7.6	lb/MMcf =	**0.03 ton/yr**
S O 2:	0.6	lb/MMcf =	**2.71E-03 ton/yr**
N O x:	100.0	lb/MMcf =	**0.45 ton/yr**
V O C:	5.5	lb/MMcf =	**0.02 ton/yr**
C O:	84.0	lb/MMcf =	**0.38 ton/yr**

**** drying system****

The following calculations determine the amount of emissions created by natural gas combustion, from the aggregate dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, and 1.4-3.

Criteria Pollutant: 2.5 MMBtu/hr * 8,760 hr/yr / 1020 Btu/cf * 2,000 lb/ton * Ef (lb/MMcf) = (ton/yr)

P M:	7.6	lb/MMcf =	**0.08 ton/yr**
P M-10:	7.6	lb/MMcf =	**0.08 ton/yr**
S O 2:	0.6	lb/MMcf =	**0.01 ton/yr**
N O x:	100.0	lb/MMcf =	**1.07 ton/yr**
V O C:	5.5	lb/MMcf =	**0.06 ton/yr**
C O:	84.0	lb/MMcf =	**0.90 ton/yr**

The following calculations determine the amount of worst case emissions created by drying system before controls, based on 8,760 hours of use and AIRS SCC #3-05-002-01 - asphaltic concrete - rotary dryer: conventional Plant:

Pollutant: Ef lb/ton x 15 / 2,000 lb/ton x ton/hr x 8,760 hr/yr

Criteria Pollutant:

P M:	45	lb/ton =	**2,956.50 ton/yr**
P M-10:	6.1	lb/ton =	**400.77 ton/yr**

*** * conveying / handling * ***

The following calculations determine the amount of emissions created by material handling, based on 8.760 hours of use and AP-42, Section 13.2.4, Equation 1. The emission factor for calculating PM emissions is calculated as follows:

PM-10 Emissions:

E = k*(0.0032)*(((U/5)^1.3)/((M/2)^1.4))
= 1.32E-03 lb PM-10/ton
2.80E-03 lb PM/ton
where k = 0.35 (particle size multiplier for <10um)
0.74 (particle size multiplier for <30um)
U = 12 mph mean wind speed
M = 4.0 material moisture content (%)

$$\frac{15 \text{ ton/hr} * 8{,}760 \text{ hrs/yr} * \text{Ef (lb/ton of material)}}{2{,}000 \text{ lb/ton}} = \text{(ton/yr)}$$

Total PM 10 Emissions: 0.09 tons/yr
Total PM Emissions: 0.18 tons/yr

*** * unpaved roads * ***

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2.2

I. Front End Loader

20 trip/hr x 0.1 mile/trip x 2 (round trip) x 8,760 hr/yr = 35,040 mile/yr

= 2.02 lb PM/mile
= 0.52 lb PM-10/mile

where k =	10	(particle size mutliplier, PM30)	(k= 2.6 for PM10)
s =	4.8	mean % silt content of unpaved plant roads	
a =	0.8	Constant for PM30/PM-10	
W =	11	tons, average vehicle weight	
b =	0.5	Constant for PM30	(b = 0.4 for PM10)
Mdry =	0.2	surface material moisture content, % (default 0.2 (dry conditions) when using rainfall parameter)	
c =	0.4	Constant for PM30	(c = 0.3 for PM10)
p =	125	number of days with at least 0.01 in of precipitation per year	
S =	5	mph speed limit	

$$\frac{2.02 \text{ lb/mi} \times 35{,}040 \text{ mi/yr}}{2000 \text{ lb/ton}} = 35.33 \text{ tons/yr}$$

$$\frac{0.52 \text{ lb/mi} \times 35{,}040 \text{ mi/yr}}{2000 \text{ lb/ton}} = 9.19 \text{ tons/yr}$$

II. Sealed Pneumatic Tank Truck

0.01 trip/hr x 0.1 mile/trip x 2 (round trip) x 8,760 hr/yr = 18 mile/yr

Ef = k*[(s/12)^a]*[(W/3)^b]/[(Mdry/0.2)^c]*[(365-p)/365)]*(S/15)
= 3.16 lb PM/mile
= 0.82 lb PM-10/mile

where k =	10	(particle size mutliplier, PM30)	(k= 2.6 for PM10)
s =	4.8	mean % silt content of unpaved plant roads	
a =	0.8	Constant for PM30/PM-10	
W =	27	tons, average vehicle weight	
b =	0.5	Constant for PM30	(b = 0.4 for PM10)
Mdry =	0.2	surface material moisture content, % (default 0.2 (dry conditions) when using rainfall parameter)	
c =	0.4	Constant for PM30	(c = 0.3 for PM10)
p =	125	number of days with at least 0.01 in of precipitation per year	
S =	5	mph speed limit	

$$\frac{3.16 \text{ lb/mi} \times 18 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.03 \text{ tons/yr}$$

$$\frac{0.82 \text{ lb/mi} \times 18 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.01 \text{ tons/yr}$$

Total PM Emissions From Unpaved Roads = 35.36 tons/yr
Total PM-10 Emissions From Unpaved Roads = 9.19 tons/yr

*** * storage * ***

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Material	Silt Content (wt %)	Pile Size (acres)	Storage Capacity (tons)	P M Emissions tons/yr	P M-10 Emissions tons/yr
Slopping Slag	1.0	0.007	400	1.48E-03	5.18E-04
Flourospar	1.0	0.009	500	1.90E-03	6.65E-04
Iron Ore	1.0	0.009	500	1.90E-03	6.65E-04
Grog	1.0	0.007	400	1.48E-03	5.18E-04
Total				**6.76E-03**	**2.37E-03**

Sample Calculation:

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
= 2.31 lb/acre/day

where s =	2	% silt
p =	125	days of rain greater than or equal to 0.01 inches
f =	15	% of wind greater than or equal to 12 mph

PM = 0.003 tons/yr P M-10: 35% of PM = 0.001 tons/yr

*** * Mixing Tower * ***

The following calculations determine the amount of emissions created by mixing tower based on 8,760 hours of use and emission data supplied by Asphalt Engineers, Inc.

Pollutant:	Ef	lb/ton x	15	ton/hr x	8,760 hr/yr
			2,000	lb/ton	

Criteria Pollutant:

P M:	0.372	lb/ton =	**24.44**	**ton/yr**
P M-10:	0.117	lb/ton =	**7.69**	**ton/yr**

*** * summary of source emissions before controls * ***

Criteria Pollutants:

P M:	**3,027.49**	**ton/yr**
P M-10:	**410.16**	**ton/yr**
S O 2:	**0.01**	**ton/yr**
N O x:	**1.52**	**ton/yr**
V O C:	**0.08**	**ton/yr**
C O:	**1.28**	**ton/yr**

(VOCs include HAPs from aggregate drying operation)

*** * source emissions after controls * ***

	dryer:		nonfugitive				
P M:	2,956.58	ton/yr x	0.19%	emitted after controls =		**5.62**	**ton/yr**
P M-10:	400.85	ton/yr x	0.19%	emitted after controls =		**0.76**	**ton/yr**
	boiler:		nonfugitive				
P M:	0.03	ton/yr x	100.00%	emitted after controls =		**0.03**	**ton/yr**
P M-10:	0.03	ton/yr x	100.00%	emitted after controls =		**0.03**	**ton/yr**
	conveying:		fugitive				
P M:	0.18	ton/yr x	50%	emitted after controls =		**0.09**	**ton/yr**
P M-10:	0.09	ton/yr x	50%	emitted after controls =		**0.04**	**ton/yr**
	unpaved roads:		fugitive				
P M:	35.36	ton/yr x	50%	emitted after controls =		**17.68**	**ton/yr**
P M-10:	9.19	ton/yr x	50%	emitted after controls =		**4.60**	**ton/yr**
	storage piles:		fugitive				
P M:	0.01	ton/yr x	50%	emitted after controls =		**3.38E-03**	**ton/yr**
P M-10:	0.00	ton/yr x	50%	emitted after controls =		**1.18E-03**	**ton/yr**
	mixing tower:		nonfugitive				
P M:	24.44	ton/yr x	2.00%	emitted after controls =		**0.49**	**ton/yr**
P M-10:	7.69	ton/yr x	2.00%	emitted after controls =		**0.15**	**ton/yr**

*** * summary of source emissions after controls * ***

Criteria Pollutant:	Non-Fugitive	Fugitive	Total
PM:	6.14 ton/yr	17.77 ton/yr	23.91 ton/yr
PM-10:	0.95 ton/yr	4.64 ton/yr	5.59 ton/yr
S O 2:	0.01 ton/yr	0.00 ton/yr	0.01 ton/yr
N O x:	1.52 ton/yr	0.00 ton/yr	1.52 ton/yr
V O C:	0.08 ton/yr	0.00 ton/yr	0.08 ton/yr
C O:	1.28 ton/yr	0.00 ton/yr	1.28 ton/yr

Appendix A: Process Particulate Matter Emissions

Company Name: National Recovery Systems
Address City IN Zip: 5222 Indianapolis Blvd, East Chicago, IN 46312
FESOP Renewal: 089-13994
Plt ID: 089-00323
Reviewer: AB/EVP
Date: October 29, 2001

Uncontrolled Emissions (tons/year)

A. Baghouses

Process	Grain Loading per Standard Cubic Foot of Outlet Air	Gas or Air Flow Rate (acfm)	Control Efficiency	Potential Emissions (tons/year*)
North Bulk Powder Silo (S1)	0.003	500	99.50%	11.26
South Bulk Powder Silo (S2)	0.003	500	99.50%	11.26
Portland Cement Storage Tank (S3)	0.022	1000	99.99%	8,259.43
Storage Processing Tank #1 (S6)	0.022	1000	99.99%	8,259.43
Storage Processing Tank #2 (S7)	0.022	1000	99.90%	825.94
Mixer & Bucket Elevator (S8)	0.022	1300	99.95%	2,147.45
Ford Station (S9)	0.022	1300	99.50%	214.75
Feeder, Muller & Briquette Press (S11)	0.022	8400	99.50%	1,387.58
Desulf station #1 (S12)	0.022	1300	99.50%	214.75
Desulf Station #2 (S13)	0.022	1300	99.50%	214.75
High Calcium Lime Silo #1 (S14)	0.022	1000	99.50%	165.19
High Calcium Lime Silo #2 (S15)	0.022	1000	99.50%	165.19
High Calcium Lime Silo #4 (S16)	0.022	1000	99.50%	165.19
Dolo Lime Silo #3 (S17)	0.022	1000	99.50%	165.19

Total Emissions Based on Rated Capacity at 8,760 Hours/Year **22,207.35**

Methodology

Potential emissions (lb/hr) = Grain Loading / SCF of Outlet Air*Air Flow Rate (acfm)*60 min/hr*1lb/7000gr/ (1-control efficiency)

Potential Emissions (tons/yr) = PM Potential (lb/hr)*1 ton/2000 lbs*8760 hrs/yr

Appendix A: Process Particulate Matter Emissions

Company Name: National Recovery Systems
Address City IN Zip: 5222 Indianapolis Blvd, East Chicago, IN 46312
FESOP Renewal: 089-13994
Plt ID: 089-00323
Reviewer: AB/EVP
Date: October 29, 2001

Controlled Emissions (tons/year)				
A. Baghouses				
Process	Grain Loading per Standard Cubic Foot of Outlet Air	Gas or Air Flow Rate (acfm)	Control Efficiency	Potential Emissions (tons/year*)
North Bulk Powder Silo (S1)	0.003	500	99.50%	0.06
South Bulk Powder Silo (S2)	0.003	500	99.50%	0.06
Portland Cement Storage Tank (S3)	0.022	1000	99.99%	0.83
Storage Processing Tank #1 (S6)	0.022	1000	99.99%	0.83
Storage Processing Tank #2 (S7)	0.022	1000	99.90%	0.83
Mixer & Bucket Elevator (S8)	0.022	1300	99.95%	1.07
Ford Station (S9)	0.022	1300	99.50%	1.07
Feeder, Muller & Briquette Press (S11)	0.022	8400	99.50%	6.94
Desulf station #1 (S12)	0.022	1300	99.50%	1.07
Desulf Station #2 (S13)	0.022	1300	99.50%	1.07
High Calcium Lime Silo #1 (S14)	0.022	1000	99.50%	0.83
High Calcium Lime Silo #2 (S15)	0.022	1000	99.50%	0.83
High Calcium Lime Silo #4 (S16)	0.022	1000	99.50%	0.83
Dolo Lime Silo #3 (S17)	0.022	1000	99.50%	0.83
Total Emissions Based on Rated Capacity at 8,760 Hours/Year after Controls				**17.13**

Methodology

Limited Emissions (lb/hr) = Grain Loading / SCF of Outlet Air*Air Flow Rate (acfm)*60 min/hr*1lb/7000gr/ (1-control efficiency)

Limited Emissions (tons/yr) = PM Potential (lb/hr)*1 ton/2000 lbs*8760 hrs/yr

Note: Actual grain loading rates for the processes S1- S17 were based on the maximum allowed by 326 IAC 6-1-11.1(d)(7). S1 and S2 are specifically limited to 0.012 lb/hr PM-10, pursuant to 326 IAC 6-1-10.1. Equivalent grain loadings were determined using these limits and available control device information.

Appendix A: Emission Summary

Company Name: National Recovery Systems
Address City IN Zip: 5222 Indianapolis Blvd., East Chicago, IN 46312
FESOP Renewal: 089-13994
Plt ID: 089-00323
Reviewer: AB/EVP
Date: October 29, 2001

Potential Uncontrolled Emissions (tons/year)

	Emissions Generating Activity							
Pollutant	Boiler	Drying System	Process Emissions	Conveying/Handling	Storage Piles	Unpaved Roads	Mixers	Total
PM	0.03	2,957.58	22,207.33	0.18	0.01	35.36	24.44	25,224.93
PM10	0.03	401.85	22,207.33	0.09	0.00	9.19	7.69	22,626.18
SO2	2.71E-03	0.01	0.00	0.00	0.00	0.00	0.00	0.01
NOx	0.45	1.07	0.00	0.00	0.00	0.00	0.00	1.52
VOC	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.08
CO	0.38	0.90	0.00	0.00	0.00	0.00	0.00	1.28
total HAPs	negl	negl	0.00	0.00	0.00	0.00	0.00	negligible

Potential emissions based on rated capacity at 8,760 hours/year, before control.

Controlled Emissions (tons/year)

	Emissions Generating Activity							
Pollutant	Boiler	Drying System	Process Emissions	Conveying/Handling	Storage Piles	Unpaved Roads	Mixers	Total
PM	0.03	5.62	14.98	0.09	3.38E-03	17.68	0.49	38.89
PM10	0.03	0.76	14.98	0.05	1.18E-03	4.60	0.15	20.57
SO2	2.71E-03	0.01	0.00	0.00	0.00	0.00	0.00	0.01
NOx	0.45	1.07	0.00	0.00	0.00	0.00	0.00	1.52
VOC	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.08
CO	0.38	0.90	0.00	0.00	0.00	0.00	0.00	1.28
total HAPs	negl	negl	0.00	0.00	0.00	0.00	0.00	negligible

Limited emissions based on rated capacity at 8,760 hours/year, after control.